NORYL™ PPE POWDERS + CONCENTRATES 6850C

REGION EUROPE

DESCRIPTION

NORYL 6850C resin concentrate is an non-reinforced blend of polyphenylene ether (PPE) + general purpose polystyrene (GPPS). This material is in granule form and is optimized for blending with polystyrene resins. NORYL 6850C resin may be an excellent candidate in microwavable food packaging applications and is compliant with US and European food contact regulations

GENERAL INFORMATION	
Features	Hydrolytic Stability, Amorphous, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Transparent/Translucent, Food contact, Creep resistant, Dimensional stability, High stiffness/Strength, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyphenylene Ether + General Purpose PS (PPE+GPPS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Circuit Boards/Additives
Packaging	Industrial Packaging

TYPICAL PROPERTY VALUES

Revision 20241010

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 50 mm/min	70	MPa	ISO 527
Tensile Stress, break, 50 mm/min	70	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	5	%	ISO 527
Tensile Modulus, 1 mm/min	2540	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	107	MPa	ISO 178
Flexural Modulus, 2 mm/min	2580	MPa	ISO 178
IMPACT [1]			
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	2	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	4	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	3	kJ/m²	ISO 179/1eA
THERMAL [1]			
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate A/120	151	°C	ISO 306
Vicat Softening Temp, Rate B/50	143	°C	ISO 306
Vicat Softening Temp, Rate B/120	145	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	125	°C	ISO 75/Af
PHYSICAL [1]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.06	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	0.25	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62
Melt Volume Rate, MVR at 280°C/5.0 kg	40	cm³/10 min	ISO 1133
Melt Viscosity, 280°C, 1500 sec-1	133	Pa-s	ISO 11443
INJECTION MOLDING [2]			
Drying Temperature	80 – 100	°C	
Drying Time	2 – 4	Hrs	
Melt Temperature	280 – 300	°C	
Nozzle Temperature	260 – 280	°C	
Front - Zone 3 Temperature	280 – 300	°C	
Middle - Zone 2 Temperature	260 – 280	°C	
Rear - Zone 1 Temperature	240 – 260	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	60 – 100	°C	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

DISCLAIMER